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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/080,861	05/18/1998	HIROSHI ENDO	1272.6808CI/	9856
5514	7590	01/24/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			LEE, TOMMY D	
		ART UNIT	PAPER NUMBER	
		2624		
DATE MAILED: 01/24/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/080,861	ENDO ET AL.
	Examiner	Art Unit
	Thomas D. Lee	2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 27 August 2004.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 13-27 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 13-27 is/are rejected.
7) Claim(s) _____ is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form.PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date .

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ .

5) Notice of Informal Patent Application (PTO-152)

6) Other: ____ .

DETAILED ACTION

Response to Amendment

1. This Office action is responsive to applicant's amendment filed August 27, 2004. Claims 13-27 are pending.

Response to Arguments

2. Applicant's arguments filed in response to the rejection of the claims under 35 U.S.C. 103(a) as set forth in the prior Office action have been fully considered but they are not persuasive. The arguments presented by applicant are based on the claims as *amended* in response to the prior rejection, and thus are not persuasive with respect to the claims as previously presented.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 13-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 4,862,285 (Miyakawa) in view of U.S. Patent 4,394,693 (Shirley).

Regarding claims 13-20, Miyakawa discloses an image processing section comprising: a memory for storing image data (line memory 36 (Fig. 1)); first processing means for executing image data magnifying processing based on first magnifying rate information (optical magnification provided by displacement of CCD 14 and lens 16 along optical axis 20 (column 4, lines 2-5; column 5, lines 36-56)); and second processing means for executing the image data magnifying processing for an image to be printed based on the image data magnified by said first processing means, based on

second magnifying rate information indicating the magnifying rate greater than 100% (electrical magnification provided by magnification converter 38, which includes interpolation table 54 for providing second magnification greater than 100% (column 5, line 61 – column 6, line 18; Fig. 4)), wherein the image data magnified by said first processing means is stored in said memory (column 5, lines 57-60), and said first magnifying rate information is determined based on at least one of a resolution of printing performed by a printing section, a processing load to be borne by said first processing means, a capacity of said memory and a resolution shown by the image data, and a magnifying rate of the image based on the image data (magnification rate determined on the basis of a magnification rate of the image to be output based on image data (column 5, lines 29-35)). Said second magnifying rate information is determined based on said first magnifying rate information and the magnifying rate of the image to be output based on the image data (for example, magnification ratio of 300% determined on the basis of a desired magnification of 450% and an optical magnification of 150% (column 5, lines 36-42)). The magnifying rate of the image based on the image data is a magnifying rate corresponding to a product of a magnifying rate shown by said first magnifying rate information multiplied by a magnifying rate shown by said second magnifying rate information (column 4, lines 44-49). Said memory is provided to store the image data magnified by said first processing means (column 5, lines 57-60).

Miyakawa does not disclose a printing system including a printing section to perform printing on a printing medium (claim 13), wherein said second processing

means is provided in the printing section (claim 17), the printing section having a printing apparatus using a printing head to perform printing on the printing medium and the image processing section having an apparatus outputting the image data to the printing apparatus (claim 18), wherein the printing head is an ink jet head ejecting ink onto the printing medium (claim 19), wherein the ink jet head has electro-thermal converting element applying thermal energy to ink to eject the ink by utilizing the thermal energy (claim 20). Shirley teaches a system and method for generating enlarged or reduced images (note Abstract), which is performed on a printing system including a printing section (noting Fig. 1, image reproduction system 39) having a printing apparatus using a printing head (ink jet array 32) to perform printing on the printing medium (paper 34) and the image processing section having an apparatus outputting the image data to the printing apparatus (data output to ink jet control 30). The method may be applied to a thermal picture reproduction system as well (column 3, lines 10-16). Whether processing means for scaling the image is providing in the printing section is a matter of design choice, so long as the processing means is present anywhere between image capture and image reproduction.

One of ordinary skill in the art would have recognized the need to provide a means for magnifying or reducing image data such as disclosed in Miyakawa in an ink jet or thermal printer, since magnification and reduction in general are well-known features in such printers. Therefore, applying the method of scaling images as disclosed by Miyakawa in an ink jet or thermal printer would have been an obvious modification to one of ordinary skill in the art.

Claims 21-27 are method claims corresponding to system claims 13-19, respectively, and thus are rejected for the reasons mentioned above, as the method steps are performed by the elements found in the combined teachings of Miyakawa and Shirley.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas D. Lee whose telephone number is (703) 305-4870. The examiner can normally be reached on Monday-Friday (7:30-5:00), alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (703) 308-7452. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thomas D. Lee
Primary Examiner
Art Unit 2624

tdl
January 18, 2005